

WHAT IS CLAIMED IS:

1. A substantially solvent-free priming composition comprising a polydiorganosiloxane polyurea copolymer comprising electron rich groups.

5 2. The priming composition of claim 1 wherein the electron rich groups are tertiary amine groups.

3. The priming composition of claim 1 further comprising a silicone tackifying resin.

10 4. The priming composition of claim 1 wherein the composition is an adhesive.

5. The priming composition of claim 4 wherein the composition is a pressure sensitive adhesive.

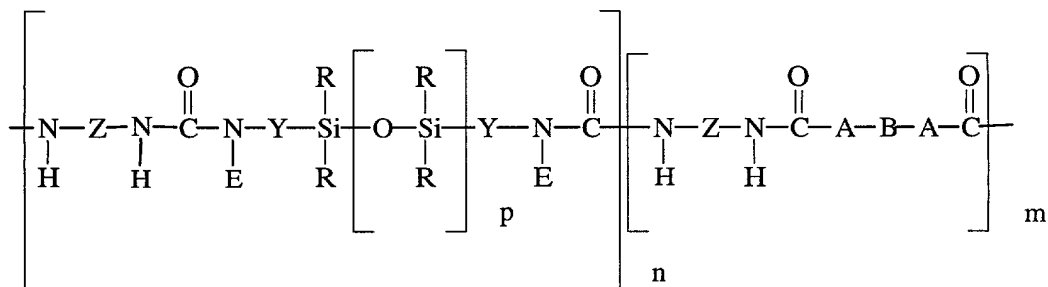
15 6. The priming composition of claim 1 wherein the composition is a primer.

7. The priming composition of claim 1 disposed on a substrate comprising acid functional groups.

20 8. The priming composition of claim 1 wherein the electron rich groups are present in an amount of at least about 0.01 wt-%.

9. The priming composition of claim 1 wherein the polydiorganosiloxane polyurea copolymer is prepared from an organic diamine polymer comprising electron rich groups.

25 10. The priming composition of claim 1 wherein the polydiorganosiloxane polyurea copolymer comprises the following repeating unit:



where:

each R is independently an alkyl moiety, a vinyl moiety or higher alkenyl moiety, a cycloalkyl moiety, an aryl moiety, or a fluorine-containing group;

5 each Z is independently a polyvalent moiety that is an arylene moiety, an aralkylene moiety, an alkylene moiety, or a cycloalkylene moiety;

each Y is independently a polyvalent moiety that independently is an alkylene moiety, an aralkylene moiety or an arylene moiety;

10 each E is independently hydrogen, an alkyl moiety of 1 to 10 carbon atoms, phenyl, or a moiety that completes a ring structure including Y to form a heterocycle;

each A is independently oxygen or  $-\text{N}(\text{G})-$ , wherein each G is independently hydrogen, an alkyl moiety of 1 to 10 carbon atoms, phenyl, or a moiety that completes a ring structure including B to form a heterocycle;

15 B is an alkylene, aralkylene, cycloalkylene, phenylene, polyalkylene, polyalkylene oxide, copolymers, or mixtures thereof, or a moiety completing a ring structure including A to form a heterocycle; with the proviso that at least one B group includes an electron rich group;

m is a number that is 1 to about 1000;

n is a number that is equal to or greater than 1; and

20 p is a number that is about 5 or larger.

11. A substantially solvent-free priming composition comprising a polydiorganosiloxane polyurea copolymer comprising electron rich groups selected from the group consisting of tertiary amine groups, pyridine groups, and combinations thereof.

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12. A pressure sensitive adhesive comprising a polydiorganosiloxane polyurea copolymer comprising electron rich groups and a silicone tackifying resin.

13. A pressure sensitive adhesive comprising a polydiorganosiloxane polyurea copolymer comprising electron rich groups and a silicone tackifying resin, wherein the electron rich groups selected from the group consisting of tertiary amine groups, pyridine groups, and combinations thereof.

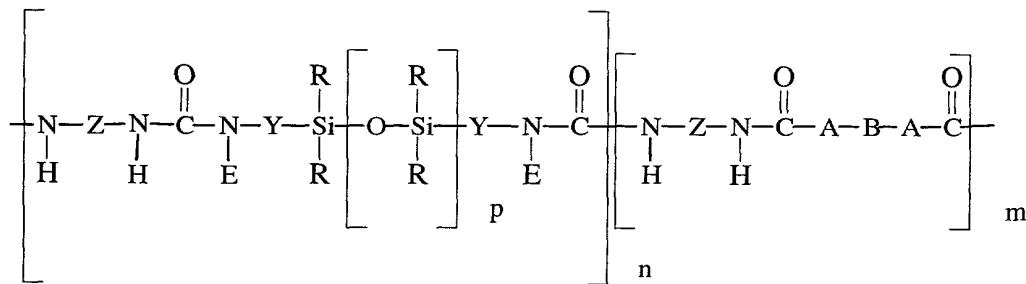
14. The pressure sensitive adhesive of claim 13 wherein the electron rich groups are tertiary amine groups.

15. The pressure sensitive adhesive of claim 13 disposed on a substrate comprising acid functional groups.

16. The pressure sensitive adhesive of claim 13 wherein the electron rich groups are present in an amount of at least about 0.01 wt-%.

17. The pressure sensitive adhesive of claim 13 wherein the polydiorganosiloxane polyurea copolymer is prepared from an organic diamine polymer comprising electron rich groups.

18. The pressure sensitive adhesive of claim 13 wherein the polydiorganosiloxane polyurea copolymer comprises the following repeating unit:



where:

each R is independently an alkyl moiety, a vinyl moiety or higher alkenyl moiety, a cycloalkyl moiety, an aryl moiety, or a fluorine-containing group;

each Z is independently a polyvalent moiety that is an arylene moiety, an aralkylene moiety, an alkylene moiety, or a cycloalkylene moiety;

5 each Y is independently a polyvalent moiety that independently is an alkylene moiety, an aralkylene moiety or an arylene moiety;

each E is independently hydrogen, an alkyl moiety of 1 to 10 carbon atoms, phenyl, or a moiety that completes a ring structure including Y to form a heterocycle;

10 each A is independently oxygen or  $-N(G)-$ , wherein each G is independently hydrogen, an alkyl moiety of 1 to 10 carbon atoms, phenyl, or a moiety that completes a ring structure including B to form a heterocycle;

B is an alkylene, aralkylene, cycloalkylene, phenylene, polyalkylene, polyalkylene oxide, copolymers, or mixtures thereof, or a moiety completing a ring structure including A to form a heterocycle; with the proviso that at least one B group includes an electron  
15 rich group;

m is a number that is 1 to about 1000;

n is a number that is equal to or greater than 1; and

p is a number that is about 5 or larger.

20 19. The pressure sensitive adhesive of claim 18 wherein at least 50% of the R moieties are methyl moieties with the balance being monovalent alkyl or substituted alkyl moieties having 1 to 12 carbon atoms, alkenylene moieties, phenyl moieties, or substituted phenyl moieties.

25 20. The pressure sensitive adhesive of claim 18 wherein m is a number that is 1 to about 25.

21. The pressure sensitive adhesive of claim 18 wherein n is a number that is greater than 8.

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22. The pressure sensitive adhesive of claim 18 wherein p is a number that is about 40 to about 1500.

23. An article comprising a substrate and a priming composition disposed thereon, wherein the priming composition comprises a polydiorganosiloxane polyurea copolymer comprising electron rich groups.

24. The article of claim 23 wherein the priming composition further includes a silicone tackifying resin.

25. An adhesive article comprising a backing and a pressure sensitive adhesive disposed on at least one major surface thereof, wherein the pressure sensitive adhesive comprises a polydiorganosiloxane polyurea copolymer comprising electron rich groups and a silicone tackifying resin.

26. The article of claim 25 wherein the electron rich groups selected from the group consisting of tertiary amine groups, pyridine groups, and combinations thereof.

27. The adhesive article of claim 25 wherein the backing comprises acid functional groups.

28. The adhesive article of claim 25 wherein the backing is a foam backing.

29. The adhesive article of claim 25 wherein the backing is a release liner and the adhesive article is a transfer tape.

30. An article comprising a backing, a pressure sensitive adhesive disposed on at least one major surface thereof, and a primer disposed on the pressure sensitive adhesive, wherein the primer comprises a polydiorganosiloxane polyurea copolymer comprising electron rich groups.

31. The article of claim 30 wherein the primer further includes a silicone tackifying resin.

32. The article of claim 30 wherein the backing is a release liner.

33. A primed surface comprising:  
a surface; and  
a primer comprising a polydiorganosiloxane polyurea copolymer comprising tertiary amine groups.

34. A method of making a priming composition, the method comprising reacting a polyfunctional chain extender comprising electron rich groups with a polyisocyanate and a polydiorganosiloxane polyamine to form a polydiorganosiloxane polyurea copolymer.

35. The method of claim 34 further comprising combining the polydiorganosiloxane polyurea with a silicone tackifying resin.

36. The method of claim 34 wherein the polyfunctional chain extender is an organic polyamine.

37. A method of priming a surface, the method comprising applying a priming composition comprising a polydiorganosiloxane polyurea copolymer comprising electron rich groups.

38. The method of claim 37 wherein the surface comprises a pressure sensitive adhesive.